



Littera Public School

Class -3 Ch. 4 Know Your Computer

A computer is a machine which can do a variety of tasks at the same time. This is the reason why computer is being used in different areas.

What is a computer and how does it work?

A computer is an electronic machine that takes data (or instructions) as input, processes it and gives the result as output.

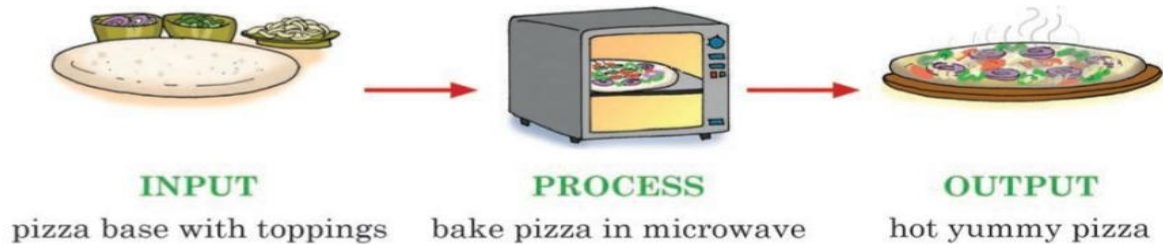
A computer works in the following way;-

1. We enter the data and instructions into the computer using the input devices (e.g., Keyboard or Mouse). This is called the input data. Instructions tell the computer about what to do with data.
2. The computer works on the input data with the help of processing unit (e.g., CPU). This is called **processing**.
3. After processing the data, the computer gives results on the output devices (e.g., monitor, printer, etc.) This is called an **output**.

The above-mentioned steps together forms the **Input-Process-Output** process (IPO process).

Let's understand it with the help of following example;

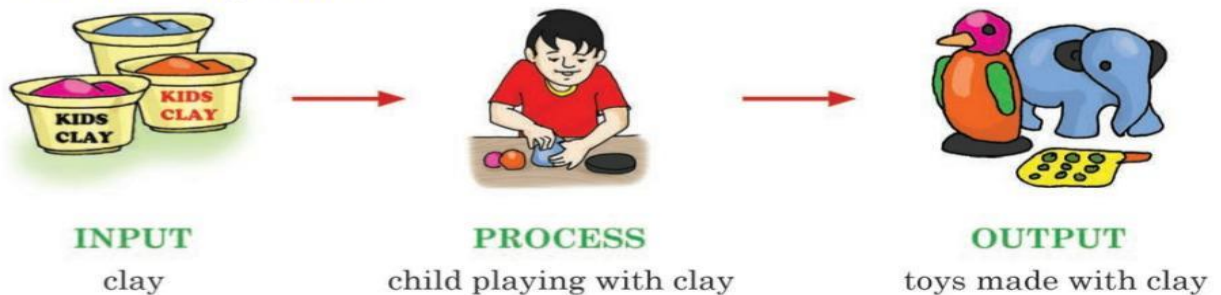
• To Prepare Pizza:



• To Prepare Mango Shake:



• To Make Clay Models:



Limitations of a computer

1. A computer is a dumb machine. It cannot do anything on its own, if no command is given to it.
2. A computer, being an electronic device, can work only when electricity is available.
3. The parts of a computer are divided into two categories: **Hardware** and **Software**. Let's learn about them.

Hardware

The physical parts of a computer which you can touch and feel are called the **Hardware**. For example- mouse, keyboard, monitor, CPU, etc.

Hardware parts are further classified into the following categories-

- a) Input Device
- b) Processing Device
- c) Output Devices
- d) Storage Device

Input Device

Input devices are used to feed data or instruction (input) into a computer. Some examples of input devices are given below.



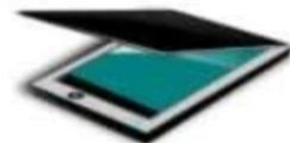
INPUT DEVICES OF COMPUTER



Mouse



Keyboard



Scanner



Microphone



Light pen



Joy stick



OCR



TrackBall



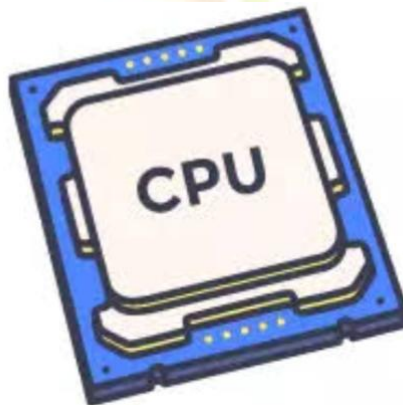
Bar code scanner

Processing Device (CPU)

A CPU processes the data or instruction given by the user and generates the desired output. It is the main processing device and is also known as "brain" of the computer system. CPU is located inside the system unit, which is a rectangular box placed on or underneath our desk.

It is made up of three main parts-

- 1. Memory unit (MU)*
- 2. Control Unit (CU)*
- 3. Arithmetic and logic unit (ALU)*



Output Devices

The output devices are used to get the output from a computer, after processing the input data. Let's look at some of these devices:-



Storage Devices

Storage devices are used to store data. For example, Hard Disk, DVD, a Pen drive, RAM, ROM, etc.

1. Primary storage device

Primary storage device are primarily used by the CPU. Primary storage consists of two different memory devices: ROM and RAM.

ROM: It stand for Read Only Memory. It stores the Basic instructions to boot (start) the computer.



RAM: It stand for Random Access Memory. It is also known as the computer memory. It stores the data temporarily.



2. Secondary storage device

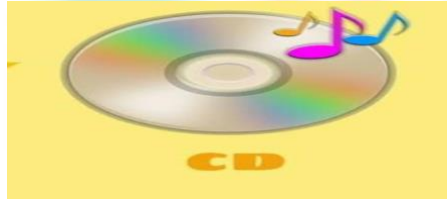
A secondary storage device is used to store the work done (file) on a computer permanently. Some examples of the secondary storage devices are given below.

The Hard Disk

The Hard Disk is the main secondary storage device of a computer. It is located inside the system unit. All the work we do on a computer, by default gets stored in the hard disk.

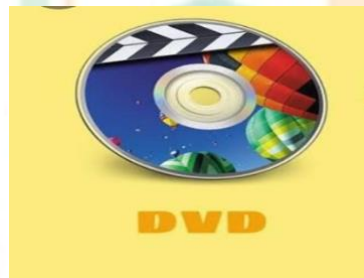


The CD (Compact Disc)



A CD is a bright round disk that can be store information like video, audio, text, images, etc. In a CD we can store data up to 700MB.

The DVD (Digital Versatile Disc)



A DVD looks similar to a CD but it can store more data than a CD. In DVD we can store data up to 4.7 GB.

The Pen Drive



A pen drive is an easy-to-use, small-sized Storage device. It is plugged into the USB port of a computer. In a pen drive we can store up to 512 GB data.

Software

The software is a set of instructions or program that tell a computer hardware what to do and how to do. A computer is useless machine without software.

For example – Windows 10, Windows 7, Tux Paint, WordPad, etc.

There are two major categories of software-

- 1. System software*
- 2. Application software*



1. System software

It control the overall functionality of a computer. Operating system is a type of system software which provides the platform to use a computer.

For example -Windows 7, Windows 10, Linux, macOS, etc.

2. Application Software

An application software help us to perform specific task or run specific application on a computer.

For example- Tux Paint, WordPad, MS Paint, etc.

USB (Universal Series Bus) Ports



This port is used to connect an external device to a computer.